

Abstract

[0103] An insulated barrier comprising first and second gas impermeable rigid walls, preferably of a composite of an organic substrate, such as plastic, coated with an inorganic matrix, such as a metal oxide, adjoining surfaces between the first and second walls in order to create an entirely closed and substantially hermetically sealed structure, a core material between the walls comprising an open-cell structure and an optional vacuum breach sensor within the insulated barrier by which the presence of atmospheric oxygen may be detected. Also disclosed is a process by which insulated barriers may be manufactured in accordance with the present invention.